WE CLAIM:

| 1 | 1. A computer-readable medium having stored thereon a data structure, |
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| 2 | comprising: |
| 3 | at least one optional data member to render received data functional within |
| 4 | a current version of the data structure when optional data is absent from the received |
| 5 | data; and |
| 6 | at least one construct to render the received data functional within the |
| 7 | current version of the data structure when the received data includes wildcard data that is |
| 8 | not specified by the current version of the data structure. |
| | |
| 1 | 2. A computer-readable medium according to Claim 1, wherein the |
| 2 | data structure is both backward-compatible and forward-compatible with other versions |
| 3 | of the data structure. |
| | |
| 1 | 3. A computer-readable medium according to Claim 1, wherein the |
| 2 | data structure is described by an XML schema. |
| | |
| 1 | 4. A computer-readable medium according to Claim 1, wherein the at |
| 2 | least one construct includes a delimiter followed by a wildcard data member. |
| 1 | 5. A computer-readable medium having stored thereon a data structure, |
| | |
| 2 | comprising: |
| 3 | a delimiter; and |

- at least one wildcard member that follows the delimiter to receive wildcard

 data received in accordance with a different version of the data structure.
- 6. A computer-readable medium according to Claim 5, wherein the data structure is both backward-compatible and forward-compatible with other versions of the data structure.
- 7. A computer-readable medium according to Claim 5, wherein the data structure is described by an XML schema.
- 8. A computer-readable medium according to Claim 5, wherein the different version of the data structure is one of an earlier version of the data structure and a later version of the data structure.
- 9. A computer-readable medium according to Claim 5, wherein a last occurrence of the at least one wildcard member is followed by an end delimiter.
- 1 10. A computer-readable medium according to Claim 5, wherein the at least one wildcard member is to be placed in a location for a schema particle.
- 1 11. A computer-readable medium according to Claim 10, wherein a 2 schema particle is any one of a group consisting of an element, a compositor, a group, or 3 an element wildcard.

- 1 12. A computer-readable medium according to Claim 10, wherein the at 2 least one wildcard member is to receive wildcard data that is any one of a group 3 consisting of a target namespace, a local namespace, or a global namespace.
- 1 13. A computer-readable medium having one or more instructions to be 2 executed by one or more processors, the one or more instructions causing the one or more 3 processors to:
- 4 receive data common to multiple generations of type;
- tolerate an absence of optional data from the received data, when the data is received in accordance with a different generation of the type;
- accept an inclusion of extra data in the received data, when the data is received in accordance with another different generation of the type; and
- yalidate a message by inserting the received data into a current generation of the type.
- 1 14. A computer-readable medium according to Claim 13, wherein the 2 type is described by an XML schema.
- 1 15. A computer-readable medium according to Claim 13, wherein to 2 tolerate an absence of data in accordance with the different generation of the type is to 3 detect no data element in an optional element member for a message.

- 1 16. A computer-readable medium according to Claim 13, wherein to
 2 accept an inclusion of extra data in the received data is to receive the extra data in a
 3 placeholder for a message.
- 1 17. A computer-readable medium according to Claim 13, wherein a 2 current generation of the type includes at least one optional element member and at least 3 one placeholder.
- 1 18. A computer-readable medium according to Claim 16, wherein the at
 2 least one placeholder includes a delimiter followed by an element member to receive the
 3 extra data.
- 1 19. A computer-readable medium according to Claim 16, wherein the at
 2 least one placeholder is to receive the further data that is any one of a group consisting of
 3 a target namespace, a local namespace, or a global namespace.
 - 20. A method, comprising:

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- 2 receiving data in accordance with different type versions;
- tolerate optional data missing from the received data, when the data is received according to a different type version;
- receive further data included in the received data, when the data is received according to another different type version; and
- formatting the received data according to a current type version into a message.

- 1 21. A method according to Claim 20, wherein the further data includes 2 the optional data.
- 1 22. A method according to Claim 20, wherein the type is described 2 using an XML schema.
- 1 23. A method according to Claim 20, wherein to tolerate missing data 2 from the received data is to allow an absent data element in an optional data member in 3 order to validate a message.
- 1 24. A method according to Claim 20, wherein to receive further data in 2 the received data is to receive the further data in a placeholder in order to validate a 3 message.
- 1 25. A method according to Claim 20, wherein the current type version 2 includes at least one optional data member and at least one placeholder.
- 26. A method according to Claim 24, wherein the at least one placeholder includes a delimiter followed by a wildcard element to receive the further data according to the another different type version, and wherein further a last placeholder is followed by an end delimiter.

- 27. A method according to Claim 24, wherein the at least one placeholder is to receive the further data that is any one of a group consisting of a target namespace, a local namespace, and a global namespace.
- 1 28. A parser, comprising:
- 2 means for receiving data in members according to multiple type versions;
- means for excusing optional data being absent from the received data, when
- 4 the data is received according to a different generation of the type; and
- 5 means for receiving further data in the received data, when the data is
- 6 received according to another different generation of the type.
- 1 29. An apparatus according to Claim 28, wherein the type is described
- 2 by an XML schema.
- 1 30. An apparatus according to Claim 28, wherein the means for
- 2 receiving further data includes at least one construct member having a delimiter followed
- 3 by a wildcard data member.
- 1 31. An apparatus according to Claim 28, wherein the means for
- 2 receiving further data is placed in a location for a schema particle.
- 1 32. An apparatus according to Claim 31, wherein the schema particle is
- 2 any one of a group consisting of an element, a compositor, a group, or an element
- 3 wildcard.

- 1 33. An apparatus according to Claim 31, wherein the means for
- 2 receiving further data is to receive data that is any one of a group consisting of a target
- 3 namespace, a local namespace, or a global namespace.